42 USDA, NASS, Indiana Field Office

FERTILIZER USAGE

FERTILIZER USAGE ON ACREAGE HARVESTED FOR GRAIN INDIANA, 2004

Fertilizer	Crop	Percent Acres	Average Number	Rate Per Treatment	Total <u>1</u> / Applied		
Nitrogen	Soybeans	15	1.6	24	30,700		
Phosphorus	Soybeans	25	1.5	58	121,400		
Potash	Soybeans	40	1.5	100	331,500		
1/ Totals may not compute due to rounding.							

CLASSIFIED FERTILIZER SALES INDIANA, 1999-2004 1/

Year	Total Tons	Tons Based on Actual Nutrients					
by Seasons <u>2</u> /	Fertilizer	N	P ₂ O ₅	K ₂ O			
1999 Fall	650,824	94,629	63,361	172,441			
2000 Spring	1,540,566	400,948	119,289	178,269			
1999-2000 Total	2,191,390	495,577	182,650	350,710			
2000 Fall	634,648	81,431	66,162	168,796			
2001 Spring	1,648,897	434,531	134,809	216,407			
2000-2001 Total	2,283,545	515,962	200,971	385,203			
2001 Fall	628,403	84,008	69,135	173,888			
2002 Spring	1,521,002	378,369	124,821	209,191			
2001-2002 Total	2,149,405	462,377	193,956	383,079			
2002 Fall	703,126	102,256	76,497	180,499			
2003 Spring	1,551,387	403,630	121,163	199,218			
2002-2003 Total	2,254,513	505,886	197,660	379,717			
2003 Fall	529,433	81,525	55,294	126,283			
2004 Spring	1,881,831	489,080	148,430	254,095			
2003-2004 Total	2,411,264	570,605	203,724	380,378			
2004 Fall	794,328	111,834	89,709	195,927			

^{1/} Data from Indiana State Chemist, Department of Biochemistry, Purdue University.

^{2/} The spring season includes January 1 through June 30 and the fall season includes July 1 through December

CHEMICAL USAGE

INDIANA PESTICIDE USAGE

Herbicides were used on 99 percent of Indiana's 5.6 million **SOYBEANS** acres during 2004. Glyphosate, commonly known as Roundup, Bronco, Clear-Out, and Extreme, was Indiana's most widely used herbicide, applied to 92 percent of the state's acreage. Chlorimuron-ethyl, known as Authority, Canopy, and Classic, was applied to 12 percent of the acreage.

HERBICIDE USAGE SOYBEANS, INDIANA, 2004

	Acres Planted	Percent	Total	Percent of
Herbicide	5,550	Soyb 99	peans 7,037	90

MAJOR CHEMICAL USAGE, INDIANA, 2003-2004

Chemical	Percer	Percent Acres		Rate Per		Total <u>1</u> /	
(Trade Name)	2002	2004	2002	2004	2002	2004	
	<u>Soybeans</u>						
Herbicides							
2,4-D (Defy, Turret)	8	4	0.33	0.39	166	94	
2,4-DP, Dimeth. salt (Amine)	*	3	*	0.53	*	88	
Acetic acid (2, 4-D, Agsco, Maestro D, Outlaw)	*	4	*	0.54	*	117	
Butoxy. ester 2, 4-D (2, 4-D/Weedone LV6)	*	3	*	0.43	*	80	
Chlorimuron-ethyl (Authority, Canopy, Classic)	11	12	0.02	0.02	11	12	
Cloransulam-methyl (Amplify, FirstRate, Gangster)	*	1	*	0.02	*	2	
Fenoxaprop (Cheyenne, Fusion, Silverado, Tiller)	5	3	0.15	0.15	41	25	
Fluazifop-P-butyl (Fusilade, Fusion, Typhoon)	5	3	0.05	0.04	13	7	
Flumioxazin (Gangster, Valor)	*	2	*	0.05	*	6	
Fomesafen (Flexstar, Reflex, Typhoon)	2	5	0.27	0.27	36	78	
Glyphosate (Roundup, Clear-Out, Extreme, Glyphomax)	89	92	1.22	1.13	6,273	5,765	
Glyphosate, diam. salt (Sequence, Touchdown)	9	2	0.93	1.35	470	129	
Imazaquin (Backdraft, Scepter, Squadron, Steel)	4	2	0.07	0.08	17	9	
Imazethapyr (Extreme, Pursuit, Steel)	10	2	0.06	0.04	33	5	
MCPA, sodium salt (Bromox, Rhino, Wildcard)	*	3	*	0.67	*	98	
Metribuzin (Axiom, Boundary, Canopy, Domain, Turbo)	5	*	0.16	*	46	*	
Pendimethalin (Pendimax, Prowl, Pursuit, Squadron)	4	2	0.92	0.68	208	64	
Sulfentrazone (Authority, Blanket, Command Xtra)	7	9	0.11	0.10	41	52	
Tribenuron-methyl (Ally Extra, Canvas, Harmony)	*	2	*	0.009	*	1	

PEST MANAGEMENT PRACTICES

PEST MANAGEMENT PRACTICES, PERCENT OF ACRES RECEIVING PRACTICE INDIANA

	1110	ANA				
Dractica	2004	2003	2000			
Practice	Soybean	Corn	All Wheat	Alfalfa Hay	Other Hay	All Other Crops
		cent			ercent	
Prevention Practices:	1 01	OOM		1.0	or com:	
No-till/minimum till used to manage pests	59	33	55	35	29	43
Remove or plow down crop residue	11	12	33	12	11	23
Clean implements after fieldwork	19	8	62	38	22	58
Field cultivated for weed control	2	10	<u> </u>			
Field edges/etc. chopped, mowed/etc.	46	36				
Water management practices			13	12	11	10
Avoidance Practices:						
Adjust planting/harvesting dates	1	4	35	14	5	35
Rotate crops to control pests	78	66	78	37	15	72
Planting locations planned to avoid pests	6	5	35	11	6	40
Grow trap crop to control insects		1	3	**	**	4
Crop variety chosen for pest resistance	37	11				
Monitoring Practices:						
Scouting by general observation	42	47				
Deliberate scouting activities	48	36				
Field was not scouted	10	17				
Established scouting process/insect trap used	11					
Scouting due to pest advis. warning/devel.	12	4				
Scouted for weeds	90	83	48	38	21	55
Scouting for weeds was done by :						
Operator, partner, or family member	87	95				
An employee	1					
Farm supply or chemical dealer	8	1				
Indep. crop consultant or comm. scout	4	4				
Scouted for insects and mites	66	65				
Scouting for insects/mites was done by :						
Operator, partner, or family member	87	92				
An employee						
Farm supply or chemical dealer	8	2				
Indep. crop consultant or comm. scout	5	7				
Scouted for diseases	66	54				
Scouting for diseases was done by :						
Operator, partner, or family member	87	91				
An employee						
Farm supply or chemical dealer	8	1				
Indep. crop consultant or comm. scout	5	8	ļ			
Records kept to track pests	11	23	22	10	8	26
Field mapping of weed problems	6	8	28	13	5	28
Soil/plant tissue analysis to detect pests	3	8	13	8	2	13
Weather monitoring	50	25	33	14	7	36
Suppression Practices:			_	-	_	_
Biological pesticides	1	1	8	2	3	6
Beneficial organisms	40	45	2	3	6	4
Scouting used to make decisions	18	15	6.4	4.5	4.0	22
Maintain ground cover or physical barriers	19	11	34	15	13	32
Adjust planting methods	10	4	12	2	5	22
Alternate pesticides with different MOA	16	22	43	16	8	45
** Less than 1 percent						
* Insufficient data						

PEST MANAGEMENT PRACTICES

PEST MANAGEMENT PRACTICES, PERCENT OF FARMS UTILIZING PRACTICE INDIANA, (Continued)

indiana, (continuea)						
Practice	2004	2003	2000			1
Traditide	Soybeans	Corn	All Wheat	Alfalfa Hay	Other Hay	All Other Hay
	Per	cent		P	ercent	
Prevention Practices:	j		j			
No-till/minimum till used	59	38	46	37	37	36
Remove or plow down crop residue	9	13	23	11	10	22
Clean implements after fieldwork	16	9	48	35	28	38
Field cultivated for weed control	3	12				
Field edges/etc. chopped, mowed/etc.	46	30	İ			
Water management practices			11	7	7	9
Avoidance Practices:	j		İ			
Adjust planting/harvesting dates	3	5	25	14	7	16
Rotate crops to control pests	78	71	71	31	18	50
Planting locations planned to avoid pests	5	5	24	9	5	23
Grow trap crop to control insects		**	2	**	**	3
Crop variety chosen for pest resistance	36	12	i -			· ·
Monitoring Practices:		. –				
Scouting for general observation	43	41	38	31	17	39
Deliberate scouting activities	45	43	İ	01	.,	00
Field was not scouted	12	16				
Established scouting process/insect trap used	12	10				
Scouting due to pest advis. warning/devel. model	12	3				
Scouted for weeds	88	84				
Scouting for weeds was done by :		01	! 			
Operator, partner, or family member	90	91				
An employee	**	01				
Farm supply or chemical dealer	5	3	<u> </u> 			
Indep. crop consultant or comm. scout	4	6				
Scouted for insects and mites	61	63				
Scouting for insects/mites was done by :						
Operator, partner, or family member	88	88				
An employee		00				
Farm supply or chemical dealer	6	4				
Indep. crop consultant or comm. scout	5	8				
Scouted for diseases	62	54				
Scouting for diseases was done by :	02	54				
Operator, partner, or family member	88	87				
An employee		0.				
Farm supply or chemical dealer	6	4				
Indep. crop consultant or comm. scout	5	9	! 			
Records kept to track pests	11	17	14	6	4	11
Field mapping of weed problems	5	11	21	11	6	15
Soil/plant tissue analysis to detect pests	3	11	11	8	3	5
Weather monitoring	53	22	23	11	7	17
Suppression Practices:			20	• •	•	.,
Biological pesticides	**	*	4	2	3	5
Beneficial organisms			2	2	**	3
Scouting used to make decisions	17	19	_	_		J
Maintain ground cover or physical barriers	21	9	25	13	15	26
Adjust planting methods	12	4	10	3	3	10
Alternate pesticides with different MOA	17	21	31	16	10	24
-	1 17	<u>~ I</u>	1 51	10	.0	4 7
** Less than 1 percent						

^{**} Less than 1 percent

^{*} Insufficient data